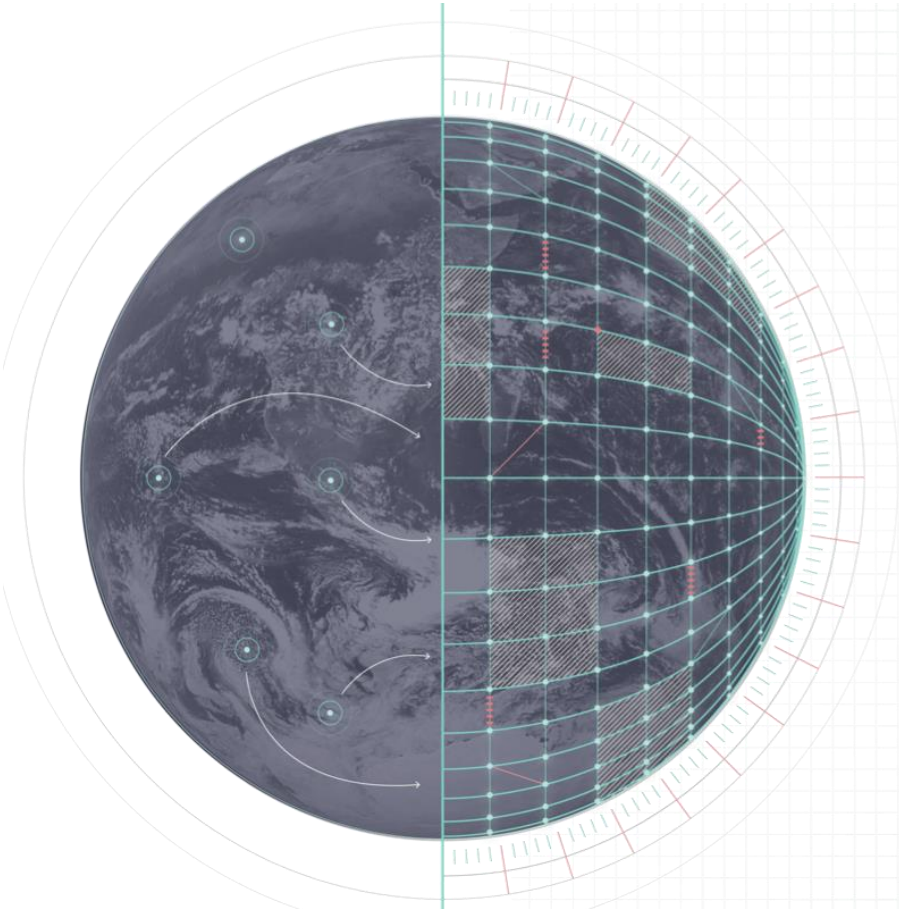

DESTINATION EARTH

Extremes Digital Twin co-development – for renewable energy

Discussion

Funded by the European Union
Destination Earth
implemented by ECMWF esa EUMETSAT

What can we do for you?

How would you use these (on-demand & global) extremes forecasts for renewable energy purposes?

(e.g. extreme events, day-ahead power production)

What kind of variables are most important to you as user?

(e.g. wind/radiation vs power production)

Data benificial for our forecasts

1) Production data. These can be from major solar and wind power plants and/or aggregated on municipality level. Possibly aggregated

2) Meta data. Location, solar power plant type (e.g. fixed, concentrating, 1- or 2-axis tilting, ...), wind power plant turbine height and diameter, (manufacturer) c_P- and c_T-curves, solar power plant nominal power, tilt and direction.

3) Curtailment data. When solar and wind power plants are switched off due to sufficient electricity production or maintenance.

How much in advance do we need to trigger/provide forecasts?

…, and with which temporal output frequency?